WASTE MANAGEMENT & RESEARCH

Volume 8 1990

EDITOR
P. Rushbrook
ASSOCIATE EDITORS
T. H. Bruner R.B. Dean
EXECUTIVE SECRETARY
J. Møller

EDITORIAL BOARD
J. H. M. Bartels, H. Billiard, N. Blakey, A. Buekens, M. Correa, P Côté, L. F. Diaz, E. Finnecy, C. G. Golueke, S. Gotoh, R. K. Ham, D. V. Jackson, H. Lenier Hickman, Jr., J. R. Holmes, R. McFarland, T. Marcinkowski, G. Rettenberger, R. Stegmann, J. Chr. Tjell, G. Urbini, P. A. Vesilind, D. C. Wilson

The Journal of the International Solid Wastes and Public Cleansing Association ISWA

ACADEMIC PRESS
Harcourt Brace Jovanovich, Publishers
London San Diego New York
Boston Sydney Tokyo Toronto

Digitized by the Internet Archive
in 2023 with funding from
Kahle/Austin Foundation

https://archive.org/details/waste-management-research_1990_8_contents

CONTENTS OF VOLUME 8

No. 1 February 1990

Editorial 1

Shrive, S. C., McBride, R. A. and Gillespie, T. J., Physiological and spectral responses of sugar maple (*Acer saccharum* Marsh.) to MSW leachate spray irrigation 3

Jones, H. A. and Nedwell, D. B., Soil atmosphere concentration profiles and methane emission rates in the restoration covers above landfill sites: equipment and preliminary results 21

Cecchi, F., Marcomini, A., Pavan, P., Fazzini, G. and Mata-Alvarez, J., Mesophilic digestion of the organic fraction of refuse: performance and kinetic study 33

Aprill, W., Sims, R. C., Sims, J. L. and Matthews, J. E., Assessing detoxification and degradation of wood preserving and petroleum wastes in contaminated soil . 45

Reports and reviews

Cortese, A. D., *The Center for Environmental Management, Tufts University* 67

Sierig, G., *Survey of hazardous waste management in the Federal Republic of Germany* 69

Strauch, D., Over, H. and Hermite, P. L., eds. *Hygienic aspects of the treatment and use of organic sludge and liquid agricultural wastes.* Reviewed by R. B. Dean 72

Final covers on hazardous waste landfills and surface impoundments. A US Environmental Protection Agency Technical Guidance Document EPA/530-SW-89-047. July 1989. Reviewed by D. J. V. Campbell and P. Rushbrook 73

Vidal, V., Straszak, A. and Ravn, H., eds. *The systems analysis approach to environmental and natural resources management in the Baltic Region.* Reviewed by D. F. Owen 74

Letter to the Editor 77

Calendar of Events 83

No. 2 April 1990

Editorial 85

Wilson, D. C. and Balkau, F., Adapting hazardous waste management to the needs of developing countries—an overview and guide to action 87
Robinson, B., Hazardous waste management in Victoria Australia 99
Razzell, W. E., Chemical fixation, solidification of hazardous waste 105
de Bruin, T., Co-disposal and encapsulation 113
Ravishankar, R., Opportunities and constraints for cement kiln incineration in Malaysia 117
Tolentino, A. S., Brabante, A. T. and David, M. V., Toxic chemicals and hazardous waste management in the Philippines 123
Lohwongwatana, B., Soponkanaporn, T. and Sophonsridsuk, A., Industrial hazardous waste treatment facilities in Thailand 129
Soponkanaporn, T. and Sophonsridsuk, A., Annex: commissioning and operating an inorganic waste treatment facility in Bangkok 135
Barnard, R. and Olivetti, G., Rapid assessment of industrial waste production based on available employment statistics 139
Monahan, D. J., Estimation of hazardous wastes from employment statistics: Victoria, Australia 145
Reports and reviews
Goh, K. S., *Developing hazardous waste programmes in Malaysia* 151
Makarim, N., *Hazardous waste management in Indonesia* 157
Benavides, L., *Attempt to conduct an industrial wastes inventory in Lima, Peru* ... 158
Penteado de Castro Neto, *Hospital wastes: collection and disposal system in Sao Paulo City* 161
Nash, J. M., *Evolution of hazardous (chemical) waste disposal facilities in Hong Kong* 163
Chiu, H. S. and Tsang, K. L., *Reduction cost by using communal treatment facilities* 165
Kungskulniti, N., *Public health aspects of a solid waste scavenger community in Thailand* 167
Marcil, A. G., *Cement kiln incineration of out-dated agricultural chemicals in Pakistan* 171

No. 3 June 1990

Editorial 175

Ball, R. and Lawson, S. M., Public attitudes towards glass recycling in Scotland 177

Benestad, C., Hagen, I., Jebens, A., Oehme, M. and Ramdahl, T., Emissions of organic micropollutants from discontinuously operated municipal waste incinerators 193

Gullett, B. K., Bruce, K. R. and Beach, L. O., Formation of chlorinated organics during solid waste combustion 203

van der Sloot, H. A., Leaching behaviour of waste and stabilized waste materials: characterization for environmental assessment purposes 215

Matsuto, T. and Ham, R. K., Residential solid waste generation and recycling in the U.S.A. and Japan 229

International Report

Jansen, J. L. A., *Waste management policies in The Netherlands* 243

Reports and Reviews

Korte, N. and Kearl, P., *Plume management—an inexpensive long-term strategy for groundwater contamination at low-risk sites* 246

Hansen, J. and Henriksen, K. eds, *Nitrogen in organic wastes applied to soils.* Reviewed by C. G. Golueke 248

Announcement 249

Calendar of Events 250

No. 4 August 1990

Editorial 253

Knox, K. and Gronow, J., A reactor based assessment of co-disposal 255

Kjeldsen, P. and Christensen, T. H., Leaching tests to evaluate pollution potential of combustion residues from an iron recycling industry 277

Velzy, C. O., Feldman, J. and Trichon, M., Incineration technology for managing biomedical wastes 293

Leton, T.G. and Stentiford, E. I., Control of aeration in static pile composting 299

Reports and Reviews

Landreth, R. E., *Documenting the U.S. landfill/impoundment permit: a guide to technical resources* 307

Lining of waste containment and other impoundment facilities. Reviewed by H. Belevi 312

Halogenated-organic containing wastes: treatment technologies. Reviewed by R. B. Dean 314

SARA Title III: intent and implementation of hazardous materials regulation. Reviewed by S. Vogt 315

The hazardous waste Q & A: an in-depth guide to the resource and recovery act and the hazardous materials transportation act. Reviewed by S. Vogt 316

Requirements for hazardous waste landfill design construction and closure. Reviewed by R. Landreth 316

Environmental aspects of stabilization and solidification of hazardous and radioactive wastes. Reviewed by J. D. Ortega 317

Letter to the Editor 319

ISWA Notice Board 321

Calendar of Events 323

No. 5 October 1990

Editorial 327

Bogner, J. E., Controlled study of landfill biodegradation rates using modified BMP assays 329

Thurnau, R. C. and Dempsey, C. R., The Incineration Research Facility 353

Tam, N. F. Y. and Vrijmoed, L. L. P., Effects of commercial bacterial products on nutrient transformations of pig manure in a pig-on-litter system 363

Muthuswamy, S. and Nemerow, N. L., Effects of plastics in anaerobic digestion of urban solid wastes 375

Young, A., Volumetric changes in landfill gas flux in response to variations in atmosphere pressure 379

Reports and Review

Dean, R. B., *Hazardous and chemical waste. A conference sponsored by ISWA at the Elmia "Energy and the Environment 90" Jönköping, Sweden, 25 April 1990* 387

The landfill-reactor and final storage: lecture notes in earth sciences (Vol. 20). Reviewed by D. J. V. Campbell 389

The professional practice of environmental management. Reviewed by L. F. Diaz 391

Natural systems for waste management and treatment. Reviewed by C. Polprasert 392

Proceedings of the fourth international resource recovery symposium, Hartford, Connecticut. June 1989. Reviewed by R. B. Dean 393

Landfill gas and anerobic digestion of solid waste. Reviewed by H. J. Ehrig . 393

The safe disposal of hazardous wastes. Reviewed by R. B. Dean 394

ISWA Notice Board 397

Calendar of Events 399

No. 6 December 1990

Editorial 403

Wigmore, J. W. and Kubrycht, S. A., Sea lagoons in Hong Kong for the disposal of pulverized fuel ash (PFA) 405

Cernuschi, S., Giugliano, M. and de Paoli, I., Leaching of residues from MSW incineration 419

Hjelmar, O., Leachate from land disposal of coal fly ash 429

Wahlström, M., Ranta, J. and Lindroos, P., Landfilling characteristics of flue gas desulphurizing wastes 451

Vehlow, J., Braun, H., Horch,K., Merz, A., Schneider, J., Stieglitz, L. and Vogg, H., Semi-technical demonstration of the 3R process 461

ISWA Noticeboard 473

Calendar of events 475

Referees of manuscripts submitted to volume 8 479

Subject index 481

Author index 483

Copyright © 1990 ISWA

ALL RIGHTS RESERVED

No part of this volume may be reproduced in any form, by photostats, microfilm, or any other means, without written permission from the publishers.

Printed in Great Britain by Latimer Trend & Company Ltd, Plymouth

This journal is printed on acid-free paper